

LUNAR ORBITER FIRST FLIGHT STATUS

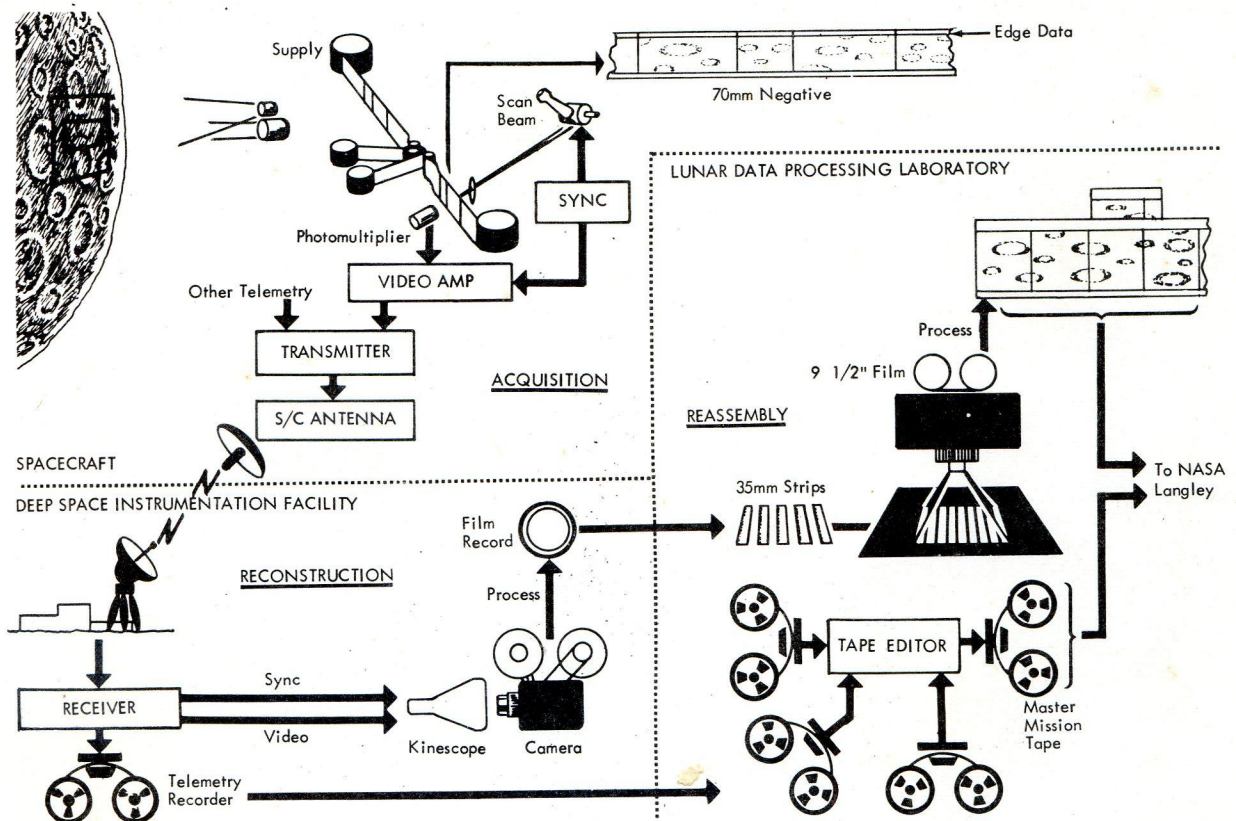


PHOTO DATA ACQUISITION, RECONSTRUCTION, AND REASSEMBLY

NASA, LANGLEY RESEARCH CENTER

BULLETIN NO. 8

SEPTEMBER 1, 1966

MISSION STATUS - THE FIRST FLIGHT LUNAR ORBITER SPACECRAFT HAS BEEN IN LUNAR ORBIT SINCE SUNDAY, AUGUST 14, 1966. WHILE IN THE INITIAL ORBIT, ON-BOARD EQUIPMENT CHECKS WERE MADE INCLUDING SOME "BACK SIDE" PHOTOGRAPHS. THESE PHOTOGRAPHS WERE TAKEN ON AUGUST 18 AND LOOKED VERY GOOD. A SMEAR PROBLEM DEVELOPED IN THE HIGH RESOLUTION PHOTOGRAPHS, BUT MEDIUM RESOLUTION PHOTOGRAPHS WERE OF EXCELLENT QUALITY.

THE ORBIT TRANSFER OCCURRED ON THE MORNING OF AUGUST 21. THE SPACECRAFT WENT INTO THE LOWER PHOTOGRAPHIC ORBIT AS PLANNED AND BEGAN ITS ACTUAL PHOTO MISSION OF SITE A1 ON AUGUST 22. SITE A9B, THE FINAL PHOTOGRAPHIC AREA OF INTEREST, WAS SHOT ON THE MORNING OF AUGUST 29. AT 1:00 P. M. EDT, TUESDAY, AUGUST 30, THE PRIORITY READOUT WAS COMPLETED. FINAL READOUT HAS STARTED AND WILL CONTINUE THROUGH THE MIDDLE OF SEPTEMBER.

SPACECRAFT STATUS - ALL ON-BOARD SYSTEMS HAVE BEEN DESCRIBED AS BEING IN A "GO" CONDITION. THE SMEAR IN THE HIGH RESOLUTION PHOTOGRAPHS WAS PARTLY RECTIFIED BY CHANGING THE PHOTOGRAPHIC ORBIT BY APPROXIMATELY SIX MILES FROM A PERILUNE OF 30.7 MILES TO 24.8 MILES. THIS TRANSFER OCCURRED AT 12:01 P. M. AUGUST 25.

AN IMMENSE AMOUNT OF KNOWLEDGE HAS BEEN DERIVED FROM MISSION A. WHAT WE HAVE LEARNED AND WILL LEARN FROM THIS FIRST FLIGHT WILL BE APPLIED TO THE SUBSEQUENT FLIGHTS TO ACHIEVE AN EVEN GREATER SUCCESS.

LANFORD